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(71) Applicant: **TEXAS INSTR INC <TD>**(72) Inventor: **DABAK ANAND G**(54) **SPACE TIME TRANSMISSION DIVERSITY FOR TDD/WCDMA**

K is supplied to a symbol decision 714.

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(57) Abstract

**PROBLEM TO BE SOLVED:** To improve reception by providing diversity of at least 2L via time and a space by receiving a data symbol by a circuit using a matching filter circuit including plural fingers, generating respective output signals by respective fingers, receiving the output signals by plural decoder circuits and generating respective output signals by respective decoder circuits.

**SOLUTION:** A finger L is provided to inversely spread the received signal from a user K. Therefore, L signals corresponding to respective multipaths of the user K selectively pass matching filters 700 to 704. Output signals of the matching filters are supplied to each of STTD(space time transit diversity) decoders 706 to 710 and then supplied to a rake synthesizer 712. Respective multipath signals of the user K are synthesized by the rake synthesizer 712. The synthesized signal of the user

